

EXPEDITED PROCEDURE

PATENT

Appl. No. 09/686,572

Response to Final Action of December 2, 2010

Docket No. US000183US

Customer No. 24737

Amendment to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

1-3. (Canceled)

4. (Previously Presented) The method of claim 6, wherein the control code comprises part of an electronic program guide (EPG) or electronic content guide (ECG).

5. (Canceled)

6. (Currently Amended) A method of configuring and using a universal programmable remote control device, the method comprising:

enabling a user to specify to a server on the internet at least one apparatus to be controlled by the universal programmable remote control device which universal programmable remote control device has a touch screen graphical user interface (GUI), the server on the internet including a database of control code sets, and wherein each apparatus to be controlled has a corresponding dedicated proprietary remote control device with a control panel, further wherein each control code set in the database corresponds to a given dedicated proprietary remote control device;

enabling the server on the internet to identify a control code set corresponding to each specified apparatus to be controlled and to provide the identified control code set as data in an extensible mark-up language (XML) format;

providing each identified control code set over the internet to a home network through which the programmable universal remote control device can access the corresponding provided extensible mark-up language format control code set, the extensible mark-up language format control code set for each specified apparatus to be controlled including (1) a code set representative of commands to control a state of the

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specified apparatus to be controlled and (2) code to control the touch screen GUI of the universal programmable remote control device to display a graphical representation of the control panel of the dedicated proprietary remote control device of the specified apparatus to be controlled, wherein the graphical representation—including comprises an image of icons and soft keys corresponding to an image of actual control panel hard keys of the respective dedicated proprietary remote control device of the specified apparatus to be controlled to thereby enable quick recognition of the dedicated proprietary remote control device while manipulating the universal programmable remote control device:

the control code set not being usable by the universal programmable remote control device or by the specified apparatus to be controlled until the control code set is converted via an extensible stylesheet language (XSL) application into commands for installation and local processing on the universal programmable remote control device and transmitted from the universal programmable remote control device to the specified apparatus to be controlled by an infra-red (IR) or radio-frequency (RF) transmission independent of the internet, wherein the specified apparatus to be controlled is not preconfigured to deliver or cause delivery of its respective control code set to a any control device;

enabling the universal programmable remote control device to convert the installed and locally processed control code set into (1) associated commands to control the specified apparatus and (2) the soft keys and the graphical representation of the icons on the touch screen GUI of the universal programmable remote control device such that the touch screen GUI of the universal programmable remote control device depicts the image of the actual control panel of the dedicated proprietary remote control device corresponding to the specified apparatus; and

using the soft keys of the displayed control panel image of the respective dedicated proprietary remote control device on the touch screen GUI to enable the universal programmable remote control device to send commands to the specified

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apparatus to be controlled via the IR or RF transmission.

7-13. (Canceled)

14. (Currently Amended) A universal programmable remote control device configured for receiving a control code set from a source over a bidirectional data network, the control code set comprising data in an extensible mark-up language (XML) format, the control code set representative of (1) commands for a selected apparatus to be controlled and (2) soft key positions and icons for a graphical representation image of control keys of a dedicated proprietary remote control device corresponding to the selected apparatus to be controlled, the remote control device comprising:

a graphical user interface (GUI) display panel on which the soft keys and icons are rendered;

the universal programmable remote control device being configured to use the control code set representative of the soft key positions and icons for ~~the control key of the dedicated remote control device corresponding to the selected apparatus to render a~~ via rendering the graphical representation image on the GUI display panel depicting an actual image of dedicated proprietary remote control device with the hard control keys of the dedicated proprietary remote control device for the selected apparatus in which the keys soft key positions and icons for selecting the commands for the selected apparatus are in the same location as the corresponding hard control keys and icons of the dedicated proprietary remote control device such that when a user switches between the universal programmable remote control device and the dedicated proprietary remote control device, the control keys are in the same position and have the same function as the dedicated proprietary remote control device to thereby enable quick recognition of the dedicated proprietary remote control device while manipulating the universal programmable remote control device;

the universal programmable remote control device being configured to convert

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via an extensible stylesheet language (XSL) application the control code set from a form that is not usable by the universal programmable remote control device or on the selected apparatus to be controlled into a command (1) commands for installation and local processing on the universal programmable remote control device that is are usable by the selected apparatus to change a state of the selected apparatus and (2) the soft keys and the graphical representation of the icons on the touch screen GUI of the universal programmable remote control device such that the touch screen GUI of the universal programmable remote control device depicts the image of the actual control panel of the dedicated proprietary remote control device corresponding to the selected apparatus; and

a transmitter converting the at least one selected command into an infra-red (IR) or radio-frequency (RF) signal which is transmitted to control the selected apparatus.

15. (Canceled)

16. (Currently Amended) A machine readable memory on which a code set is stored for controlling consumer electronics (CE) equipment and for being supplied as data in an extensible mark-up language (XML) format, the control code set for being converted via an extensible stylesheet language (XSL) application into commands for installation and local processing on a universal programmable remote control device, the installed and locally processed commands (1) representing an infra-red (IR) or radio-frequency (RF) signal for transmission by the universal programmable remote control device to the CE equipment and (2) rendering a control key layout as a graphical representation image of icons and soft keys on a touch screen graphical user interface (GUI) of the universal programmable remote control device that emulates a key layout of a dedicated proprietary remote control device for the CE equipment, wherein the CE equipment to be controlled is not preconfigured to deliver or cause delivery of its respective control code set to any control device, wherein the graphical representation comprises an

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image of icons and soft keys that corresponds to an image of actual control panel hard keys of the dedicated proprietary remote control device of the CE equipment to be controlled to thereby enable quick recognition of the dedicated proprietary remote control device while manipulating the universal programmable remote control device, the touch screen GUI of the universal programmable remote control device depicting the image of the actual control panel of the dedicated proprietary remote control device corresponding to the CE equipment.

17. (Currently Amended) A method comprising:

enabling each of a plurality of users to specify to a server, over a bidirectional data network, a user specified apparatus for being controlled by a universal programmable remote control device of a user;

enabling the server to identify extensible mark-up language (XML) tags that specify control-codes-code sets included in data in XML language format, the control-codes-code sets being representative of (1) control codes for controlling the user specified apparatus and (2) instructions for rendering icons and soft buttons on a graphical user interface (GUI) touch screen which emulate control keys of a dedicated proprietary remote control device for the specified apparatus; and

enabling the server to communicate over the bidirectional data network with a home network that includes the user's universal programmable remote control device for delivery of the control-codes-code sets to the universal programmable remote control device, wherein the control-codes-code sets are not directly usable by the universal programmable remote control device or the user specified apparatus until conversion of the control-codes-code sets by the home network via an extensible mark-up language (XML) application into commands for being installed and locally processed by the universal programmable remote control device and that can be sent by the universal programmable remote control device to the user specified apparatus independent of the bidirectional data network, wherein the user specified apparatus to

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be controlled is not preconfigured to deliver or cause delivery of its respective control code set to any control device, wherein the graphical representation comprises an image of icons and soft keys that corresponds to an image of actual control panel hard keys of the dedicated proprietary remote control device of the user specified apparatus to be controlled to thereby enable quick recognition of the dedicated proprietary remote control device while manipulating the universal programmable remote control device, the touch screen GUI of the universal programmable remote control device depicting the image of the actual control panel of the dedicated proprietary remote control device corresponding to the user specified apparatus.

18. (Currently Amended) A method, comprising:

providing control-codes—code sets as data in an extensible mark-up language (XML) format to a home network including a universal programmable remote control device, the control-codes—code sets for being converted via an extensible mark-up language (XML) application into commands for installation and local processing on the universal programmable remote control device, wherein the control-codes—code sets include a first set of control codes with rendering instructions for rendering a graphical representation image of icons and soft keys on a graphical user interface (GUI) touch screen using an extensible stylesheet language (XSL) style sheet, wherein the graphical representation image on the GUI touch screen emulates a key layout of a dedicated proprietary remote control device for a consumer electronics (CE) equipment, wherein the rendered graphical representation image of icons and soft keys corresponds to an image of actual control panel hard keys of the dedicated proprietary remote control device of the CE equipment to be controlled to thereby enable quick recognition of the dedicated proprietary remote control device while manipulating the universal programmable remote control device, the touch screen GUI of the universal programmable remote control device depicting the image of the actual control panel of the dedicated proprietary remote control device corresponding to the CE equipment,

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and a second set of control codes representing commands suitable for transmission by the universal programmable remote control device over an infra-red (IR) or radio-frequency (RF) network to the CE equipment to control a state of the CE equipment, the control codes being provided from a database over a bidirectional data network to the home network, wherein the CE equipment is not pre-configured to deliver or cause delivery of its respective control codes to the universal programmable remote control device.

19.-20. (Canceled)

21. (Previously Presented) The device of claim 14, wherein the bidirectional data network includes the internet, and wherein the source is located on the internet and remote from the selected apparatus and the bidirectional data network.

22.- 23. (Canceled)

24. (Previously Presented) The method of claim 17, wherein the bidirectional data network includes the internet, the user specifying the apparatus to be controlled over the internet to the server, which server is remote from and not a part of the home network or the specified apparatus, and the control codes are sent via the internet to the home network to the universal programmable remote control device.

25. (Previously Presented) The method of claim 18, wherein the database is remote from and not a part of the home network and not a part of the consumer electronics (CE) equipment.

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26. (Previously Presented) The method of claim 25, wherein the bidirectional data network includes the internet, the control codes being sent over the internet from the database to the home network.

27.- 31. (Canceled)

32. (Previously Presented) The method of claim 17, wherein rendering the icons and soft buttons to emulate the control keys of the dedicated remote control device for the specified apparatus includes:

rendering each icon or soft button in a same relative location as a corresponding control key of the dedicated remote control device for the specified apparatus which performs the same function.

33. (Canceled).